



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 09/824,481 | 04/02/2001 | Tomoyuki Seki | 5077-000028 | 9071 |

7590 04/20/2004

Hamess, Dickey & Pierce, P.L.C.
Gregory A. Stobbs
P.O.Box 828
Bloomfield Hills, MI 48303

EXAMINER

LEVI, DAMEON E

| | |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

2841

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/824,481

Applicant(s)

SEKI ET AL.

Examiner

Dameon E Levi

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on RCE, 03/29/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-26 are rejected under 35 U.S.C. 102(b) as being anticipated by Dixon et al US Patent 4677338.

Regarding claim 14, Dixon et al discloses a discharge lamp comprising:

- a luminous bulb in which a luminous material is enclosed and a pair of electrodes are opposed in the luminous bulb; and a pair of sealing portions for sealing a pair of metal foils electrically connected to the pair of electrodes, respectively, each of the pair of sealing portions including a shrink seal structure and each of the pair of metal foils including an external lead on a side opposite to a side electrically connected to a corresponding electrode of the pair of electrodes ;wherein at least one of the pair of sealing portions is provided with at least one constricted portion , each at least one constricted portion being formed in an area between an end of the electrode and an end of the external lead and each being provided only in an area other than an area in which the electrode and the metal foil are connected and other than an area in which the external lead and the metal foil are connected, and whose length in a direction substantially perpendicular to the surface of the metal foil in the sealing portion is smaller than that of other portions in the sealing portion; and wherein the area in which the metal foil and the external lead are connected is not provided with

the constricted portion (for example, see elements 6,7,2,3,4,5,8,9, see constricted portions on elements 2,3, Fig 1)

Regarding claim 15, Dixon et al discloses wherein the length of at least one of the constricted portions in the direction substantially perpendicular to the surface of the metal foil in the sealing portion is 70 to 90% of the length of the other portions without the constricted portion (for example, see constricted portions on elements 2,3, Fig 1)

Regarding claim 16, Dixon et al discloses wherein one of the other portions is the sealing portion wherein the electrode is disposed (for example, see Fig 1)

Regarding claim 17, Dixon et al discloses wherein one of the other portions is the sealing portion wherein the electrode is disposed (for example, see Fig 1)

Regarding claim 18, Dixon et al discloses wherein at least one of the constricted portions is provided in a portion relatively nearer to the luminous bulb side, rather than a center of the sealing portion (for example, see Fig 1)

Regarding claim 19, Dixon et al discloses wherein a plurality of constricted portions are formed on the sealing portion (for example, see constricted portions on elements 2,3, Fig 1).

Regarding claim 20, Dixon et al discloses wherein ends of the pair of sealing portions on a side opposite to the luminous bulb side are tapered (for example, see Fig 1)

Regarding claim 21, Dixon et al discloses wherein each of the pair of metal foils is attached tightly to a glass portion extended from the luminous bulb, and wherein each of the pair of metal foils is a molybdenum foil (for example, see Fig 1, see column 3, lines 18-40).

Art Unit: 2841

Regarding claim 22, Dixon et al discloses wherein the luminous material comprises at least mercury (for example, see column 1, lines 26-30).

Regarding claim 23, Dixon et al discloses wherein a thickness of a glass portion from a side face of the metal foil to the surface of the constricted portion is at least 2mm (for example, see Fig 1).

Regarding claim 24, Dixon et al discloses wherein cross-sectional shapes of the sealing portion and the constricted portion are circular, and an outer diameter of the constricted portion is smaller than that of the other portions (for example, see Fig 1).

Regarding claim 25, Dixon et al discloses a lamp unit comprising the discharge lamp and a reflecting mirror for reflecting light emitted from the discharge lamp (for example, see Fig 1, also see Abstract).

Regarding claim 26, Dixon et al discloses wherein the at least one constricted portion is only formed in an area between an end of the electrode and an end of the external lead (for example, see Fig 1)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dameon E Levi whose telephone number is (571) 272-2105. The examiner can normally be reached on Mon.-Fri. (9:00 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David S Martin can be reached on (571) 272-2107. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2841

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DEL

Dameon E Levi
Examiner
Art Unit 2841



DAVID MARTIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800